Work Order ID 115839 *115839* Page 1 April-04-14 10:22:58 AM D3511-041 Item ID: Accept *N900040100* Setup Start **Revision ID: Item Name:** Wearplate Assembly *NS2* *****2* **Start Date:** 4/04/14 Start Qty: 8.00 **Cust Item ID:** Required Date: 4/04/14 Req'd Qty: 8.00 *****2* **Customer:** Reference: Start Run **Approvals:** Process Plan: MLJ Date: 14-04-09 Tooling: Date: Stop QC: Date: **SPC (Y/N):** Date: *NR2* Sequence ID/ Operation **Tool ID** Plan Reject Set Up/ Tool # Reject Accept Insp. Work Center ID Description Qty Stamp **Run Hours** Code Qty Number **Draw Nbr Revision Nbr** D3511 Rev A 0.00 FLOW WATER JET B *100* JM14-05-2 Waterjet 0.00 Memo Prog Rev: FLOW CNC Waterjet 1-Cut as per Dwg D3511 Dwg Rev: 304 . 188" Deburr if necessary Identify as D3511-1 110 QC2- Inspect parts off machine FAI/FAIB 0.00 *110* JM14-05-2 ОC 0.00 Memo Quality Control DAS 120 QC8- Inspect parts - second check 0.00 AH *120* QC 0.00 Memo

Quality Control

DQA:		Dat	:e:	· · · · · · · · · · · · · · · · · · ·	WORK ORDER NON	~			IDDATE				DART
QA Closed:		Dat	e:		WORK ORDER NON	-((JNFOI	RIVIANCE / C	PDATE	W	ork Order u	odate only	AEROSPACE
Work Orde	er:				DISPOSITION				AGAINST	DE	PARTMENT	/PROCESS	,
Part N	lo				Rework Scrap Use-as-is Suspected Unapproved			Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite		4	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root				Desc	ription of work order update	Ī	nitial	Ad	ction		Sign &		
Cause	Da	e Ste	p Qt	y	or non-conformance	Ch	ief Eng	Desc	cription		Date	Verification	QC Inspector
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Offset/Setup Process Supplier Training Transport Unapproved				-	1								
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Landir	ng Gear			· · · · · · · · · · · · · · · · · · ·	General	FAI					1		
	Crack Crimp Cuffs Crush Heat Inspe Mark Turni	e Not Cons s d/Kink/Rip ing Treat ction Strip s/Chatter ng Sequen	ple/Wav in Tube ce		Bend BOM/Route Broken/Damage/Defect Burrs Contamination Countersink Cut Too Short Drawing Orill Holes Finish		Grain Hardwa Inspecti Instruct Misalig Mislabe Misread Off-set	on Incomplete/Uions Incomplete/Uned/off center led I Calibration	/Unclear		Outside Dim Over/Under Part Incorred Part Lost/Mi Part Moved Positioned V Power Loss/	tolerance ci ssing Vrong	Pressure/Forced Set-up Temperature/Cure Weld Wrong Stock Pulled Other
	lWave	/Twist in 1	Tuhe	1	Fit/Function	1	Out of 9	equence					

115839

Page 2

April-04-14 10:22:58 AM Item ID: D3511-041 Accept *N900040100* Setup Start **Revision ID:** Stop **Item Name:** Wearplate Assembly **Start Date: Start Qty: 8.00** 4/04/14 **Cust Item ID:** Required Date: 4/04/14 Req'd Qty: 8.00 **Customer:** Reference: Run Start Process Plan: Date: **Approvals:** Tooling: Date: Stop QC: Date: _____ SPC (Y/N): Date: Sequence ID/ Operation Tool ID Set Up/ Tool # Plan Accept Reject Reject Insp. **Work Center ID** Description **Run Hours** Code Qty Stamp Qty Number 130 0.00 Small Fab *120* Brake NC 0.00 Memo DAS Brake NC Bend fwd 90 deg. per dwg D3511 30 9-89 DAS 140 QC5- Inspect part completeness to step on W/O 0.00 *140* QC 0.00 Memo Quality Control Weld per dwg A/R S.S. rod Batch://1125054 150 0.00 Large Fab *150* Large Fab 0.00 Memo Large Fab weld cups as per dwg

DQA:		. Date:			WORK ORDER NON	~	NEO	DAGABLOE / LIDD	A T.C				`DART
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ļ	Heat Trea			<u> </u>	Cut Too Short	_	Mislabe		L	Ш	Power Loss/	Surge	Other
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Work Ordo <i>April-04-14 10:</i>		5839		*115	5839*						Page 3
Item ID: Revision ID: Item Name:	D3511-041 Wearplate As	sembly	**************************************	Accept	*N900	ი4ი	100)* ፡	Setup Sta	17	IS1* IS2*
Start Date: Required Date: Reference:	4/04/14 4/04/14	Start Qty: 8.00 Req'd Qty: 8.00	*8* *8*		Cust Item I Customer:	D:				1	1. 1/
Approvals:	Process Pla	an:	Date:	Tooling: SPC (Y/N):		ate:		j	Run Sta St	^ \ op	IR1* IR <i>2</i> *
Sequence ID/ Work Center II	D	Operation Description QC9- Inspect visual per (OSI004- Fusion Welds	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
155 QC Quality Control		Мето	Control House	0.00					14.05)) 	DAS - 9 9-89
*160 *160* Small Fab Small Fab		Small Fab Memo Form as per	Dwg D3511	0.00				8X	-		-14/os/zš
180 *1 2 0 * QC		QC5- Inspect part comple	eteness to step on W/O	0.00 27 0.00 27 0.00 14 5 2	Y 2			8			

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Quality Control

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Landi	ing (General				· · · · · · · · · · · · · · · · · · ·	-		
		Bending				Bend		 Folio/F	Program		Outside Dim	nensions	Pressure/Forced
	\vdash	Centre N	ot Concei	ntric		BOM/Route		Grain	J		Over/Under	tolerance	Set-up
	Г	Cracks				Broken/Damage/Defect		Hardwa	are .		Part Incorre	ci 🗀	Temperature/Cure
		Crimp/Ki	nk/Ripple	/Wave		Burrs		Inspect	tion Incomplete/U	nqualified	Part Lost/M	issing	Weld
		Cuffs				Contamination		instruc	tions Incomplete/I	Unclear	Part Moved	L	Wrong Stock Pulled
		Crushing				Countersink		Misali	gned/off center		Positioned \		- 1
		Heat Trea	at			Cut Too Short		Mislab	eled		Power Loss,	/Surge	Other
		Inspectio	n Strip in	Tube		Drawing		Misrea					
		Marks/Cl	natter		L	Drill Holes	\perp	Off-set					
		Turning S				Finish		-1	Calibration		-		
1		Wave/Tw	vist in Tub	oe		Fit/Function		Out of	Sequence		_		

Work Ord				*115	839*							Page 4
Item ID: Revision ID: Item Name:	D3511-0	e Assembly		Accept	*N900	1 040	100)*	Setup	Start Stop	*NS	•
Start Date: Required Date: Reference:	4/04/14	Start Qty: 8.00 Req'd Qty: 8.00	*8* *8*		Cust Item Customer:						1/1/	/"
Approvals:	Process QC:	Plan:	Date:	Tooling: SPC (Y/N):		Date: Date:			Run	Start Stop	*NR	!1* !2*
Sequence ID/ Work Center II 190 *100* Powdercoat Powder Coating	D	Operation Description Black Sandtex(Ref:4.3.5) Memo START TOWN	Q. X	Set Up/ Run Hours 0.00 0.00 OVEN TEMPERATURE	Tool ID	Tool#	Plan Code	Accep Qty	t Rej Qty		-	nsp. Stamp
200 *200* QC Quality Control		QC3- Inspect Part Finish Memo	· ·	0.00 DAS 0.00 127 0.00 15 6	16			8				
210 *910* Packaging		Identify as per dwg & St Memo	ock Location: <u>ST5</u> 5/	0.00				8x		DAS 28 9-89	MAY	2 6 2014

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Packaging

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Work Ord April-04-14 10.		15839		*11 <i>5</i>	5839*							Page 5
Item ID: Revision ID: Item Name:	D3511-041 Wearplate As	ssembly		Accept	*N900	040	100)* s	Setup (Start Stop		S1* S2*
Start Date: Required Date: Reference:	4/04/14 : 4/04/14	Start Qty: 8.00 Req'd Qty: 8.00	* <u>8</u> * * <u>8</u> *		Cust Item I Customer:	D:					ı u.	
Approvals:	Process Pl QC:	an:	Date:	Tooling: SPC (Y/N):		nte:		F		Start Stop		R1* R2*
Sequence ID/ Work Center II 220	D	Operation Description QC21- Final Inspection -	Work Order Release	Set Up/ Run Hours	Tool ID	Tool#	Plan Code	Accept Qty	Rejec Qty		Reject Number	Insp. Stamp

0.00

Memo

220

Quality Control

MLJ_14.5.27

DQA:			Date:										TAAPT
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Part N	lo.					Scrap			Machining	Small Fab	Pro	d. Eng. Coor.	Quality
						Use-as-is	1	Thern	noforming	Finishing	Rec/Sto	re/Packaging	Other
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ĺ		Cracks				Broken/Damage/Defect		Hardwa	are		Part Incorre	 	Temperature/Cure
		Crimp/Kir	nk/Ripple	/Wave	L	Burrs		Inspect	tion Incomplete/Un	nqualified	Part Lost/Mi	ssing	Weld
1		Cuffs				Contamination	<u> </u>	4	tions Incomplete/L	Jnclear	Part Moved		Wrong Stock Pulled
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April-04-14 10:22:57 AM

Work Order ID: 115839

115839

Parent Item:

D3511-041

D3511-041

Parent Item Name:

Wearplate Assembly

Start Date: 4/04/14

Required Date: 4/04/14

Start Oty: 8.00

1.484

**

Required Qty: 8.00

Comments:

IPP Rev:A New Issue

06-05-04

JLM

No

IPP Rev:B New process 06-05-05 EC

Purchased

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3503-1		Manufactured	No		•	150	Each	36.0000	8	64			
D3503-1	•								**				14-05-
				Location	11560)	Loc	<u>Qty</u> 36	Loc Code	,	3/ 4			

304 SHEET 0.188

M304S188

Location	Loc Qty	Loc Code
MAT020	58.7	
113216	33	
124445	25.7	

100

17 19

sf

58.7000

Jm14-05-2

24445

DQA:			. Date:	-		· <u>-</u>	_						•	$\mathbb{T}\mathbb{R}\mathbb{A}\mathbb{G}^{D}$
QA Closed:		•	Date:	,		WORK ORDER NON	-C(ONFO	RMANCE / (/ork Order uj	ndate only		AEROSPACE
Q/ Closed.			Dute.		• • •		-				ronk order di	- Juate Only		
Work Orde	er:					DISPOSITION		,		AGAINST D	EPARTMENT	/PROCESS		
	_	• •				Rework	1		Skid-tube	Crosstube		Water Jet		Engineering
Part N	lo.					Scrap			Machining	Small Fab	Pro	d. Eng. Coor.		Quality
	_					Use-as-is		Thern	noforming	Finishing	Rec/Sto	re/Packaging		Other
NCR N	10				 .	Suspected Unapproved			Large Fab	Composite]	Supplier		
Root					Desc	ription of work order update	П	I Initial	A	ction	Sign &	·	Т	
Cause		Date	Step	Qty		or non-conformance	Ch	nief Eng	Des	cription	Date	Verification	n	QC Inspector
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Handling/Pre	\Box													
Material														
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Offset/Setup	_													
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	-	Cracks	or concer	itric .	\vdash	Broken/Damage/Defect	-	Hardwa	uro	<u> </u>	Part Incorred		—1.	Temperature/Cure
	—	Crimp/Kir	k/Rinnle	/\/\/ave	-	Burrs	\vdash	4	ion Incomplete/l	Unqualified	Part Lost/Mi		$\overline{}$	Weld
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	-	Crushing				Countersink	┢	4	ned/off center	·	Positioned V	l Vrong		TO THE STOCK TO WHEEL
<u> </u>	-	Heat Trea	t		\vdash	Cut Too Short		Mislabe		<u> </u>	Power Loss/	·	\neg	Other
		nspection		Tube	ļ	Drawing		Misread		`		ا ۱		
	_	Marks/Ch				Drill Holes		Off-set						
	_	Turning S				Finish	\Box	-	Calibration		•	·		
	_	Wave/Tw	•	e		Fit/Function		Out of	Sequence					

DART AEROSPACE LTD	Work Order:	112877
Description: Wearplate	Part Number:	D3511-1
Inspection Dwg: D3511 Rev: A		Page 1 of 1

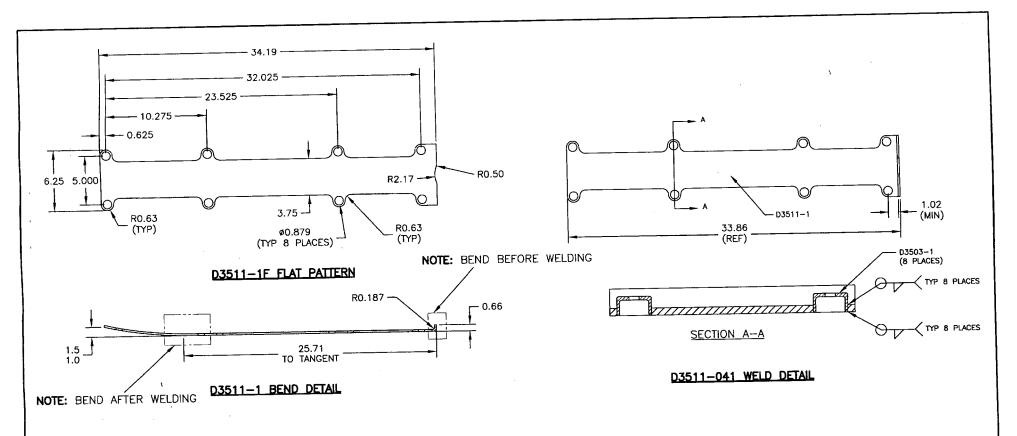
FIRST ARTICLE INSPECTION CHECKLIST

Х	First Article		Prototype
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Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.879	+0.010/-0.001	0.885"			U	JAM05
34.19	+/-0.030	34.19"	-		T	Janot
32.025	+/-0.010	32.025			T	
6.25	+/-0.030	6.255	-		٧	
5.000	+/-0.010	4998"				
3.75	+/-0.030	3.765			V	
0.625	+/-0.010	0.625"			U	
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					DAS			-
Me	asured by:	Tru	Audited by:	MH	27	Prototype Approval:	N/A	_
-		14-05-2	Date:	14/05	/ 9-59	Date:	N/A	
	Date.	14-05- L		1.700	102			•

г	Davi	Date	Change	Revised by	Approved	
L	Rev		5/0 50544 044	KJ/JLM		
1	Α	06.05.08	New Issue P/O D3511-041	KJ/JLM		
ļ	В	07.01.17	Dimensions updated	KJ/JLIVI	L	



D3511-041 WEARPLATE ASSEMBLY

MAKE D3511-1F WEARPLATE FROM:

AISI 304/316 STAINLESS STEEL (0.188 THICK) (REF DART MATERIAL SPEC. M304S7GA)

WELD PER DART QSI 004 2)

FINISH: POWDER COAT ASSEMBLY BLACK SANDTEX (REF. 4.3.5.7) PER DART QSI 005 4.3

3) ALL DIMENSIONS ARE IN INCHES

· TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

BREAK ALL SHARP EDGES 0.005 TO 0.015

D3511-041 WEARPLATE ASSEMBLY PARTS LIST

QTY -841	PART NUMBER	DESCRIPTION
X	D3511-041	WEARPLATE ASSEMBLY
1	C3511-1	WEARPLATE
- a	D3500-1	CUP

RELEASED 115839 MLJ

.04 NEW ISSUE 06.04.04 DART AEROSPACE LTD. DART PH THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD. D3511 IIILE DATE WEARPLATE 06.04.04

